

Observations of Brooks' Comet (g 1892) and Holmes' Comet (f 1892) made at the Royal Observatory, Greenwich.

(Communicated by the Astronomer Royal.)

The observations were made with the East, or Sheepshanks, Equatorial, aperture 6·7 inches, by taking transits over two cross wires at right angles to one another, and each inclined 45° to the parallel of declination. Transits were sometimes taken also over a third wire bisecting the angle between the two other wires. Magnifying power, 55.

March 1893.

Brooks' Comet.

Greenwich Mean Solar Time.			Observer.		* R.A.		Corr. for Refraction.		Corr. for Motion of		Log. factor of Parallax.		No. of Comps.		Apparent R.A.		Apparent N.P.D.		Comp. Star.	
d	h	m	s		m	s	s	s	s	s					h	m	s	°		
1893. Jan.	10	8	36	30	H.	-2	14	00	+0	04	9	88	43	3	20	59	37	02	27	18
	10	9	1	34	"	-0	12	98	+0	01	9	87	42	2	21	0	0	06	27	19
	15	7	44	7	"	+1	21	55	+0	03	9	79	58	3	22	20	24	35	34	47
	15	8	20	34	"	-0	53	30	0	00	9	80	80	2	22	20	43	58	34	49
	20	10	6	19	A. C.	-0	6	43	-0	01	9	72	12	2	22	20	43	58	34	49
	20	10	15	45	"	-0	12	03	+0	01	9	71	54	4	...	...	...	...	...	...
Feb.	4	6	51	21	"	+0	4	10	0	00	9	56	07	2	0	1	10	24	56	52
	4	6	55	37	B.	+0	3	03	0	00	9	57	50	3	0	1	9	17	56	52
	5	6	45	16	"	-1	3	70	0	00	9	56	25	2	...	...	...	...	...	...
	5	6	52	4	A. C.	-1	2	43	0	00	9	57	00	4	...	...	...	...	...	...
	5	6	55	0	"	-1	35	66	0	00	9	57	32	1	...	...	...	...	...	...
	8	6	51	42	B.	-0	6	18	0	00	9	56	78	3	0	9	26	58	59	22
	10	7	13	45	"	+0	55	09	0	00	9	59	25	2	...	...	...	...	...	...
	16	6	41	23	"	-0	27	56	0	00	9	56	03	3	...	...	...	...	...	...

Holmes' Comet.

Greenwich Mean Solar Time.	Observer.	α \star R.A.		Corr. for Refraction.	Corr. for Motion of \odot	Log. factor of Parallax.	No. of Comps.	Apparent R.A.		Apparent N.P.D.	Comp. Star.
		m	s					h	m		
1893. Jan. 20 9 27 41	A. C.	+2	14'93	0'00	s	0'00	2	1	27	56 21	7"7 m
24 9 24 19	"	+0	2'93	0'00	s	0'00	3	1	32	56 19 33'5	n
27 6 19 29	L.	+0	29'42	0'00	s	0'00	2	...	...	...	0
27 6 28 27	A. C.	+0	30'08	0'00	s	0'00	2	...	...	...	0
27 6 33 2	B.	+0	28'64	0'00	s	0'00	2	...	...	...	0
Feb. 4 7 9 34	"	+0	58'91	0'00	s	0'00	3	1	48	56 7 49'9	p
4 8 36 20	A. C.	+1	8'39	0'00	s	0'00	4	1	48	56 8 15'9	p
5 8 34 13	B.	-0	12'40	0'00	s	0'00	3	...	...	...	q
5 8 49 7	"	+2	36'89	0'00	s	0'00	2	1	50	56 6 29'1	p
5 9 42 12	A. C.	-2	33'20	0'00	s	0'00	2	1	50	56 7 18'9	r
6 6 42 56	B.	-1	16'31	0'00	s	0'00	2	1	51	56 4 54'8	r
6 7 14 24	T. H.	-1	12'45	0'00	s	0'00	4	1	51	56 5 1'3	r
7 8 12 19	H.	+0	24'96	0'00	s	0'00	5	1	53	56 3 16'4	r

Greenwich Mean Solar Time.	Observer.	*R.A.			Corr. for Refraction.	Corr. for Motion of \odot	Log. factor of Parallax.	\odot -*N.P.D.	Corr. for Refraction.	Corr. for Motion of \odot	No. of Comps.	Apparent R.A.			Apparent N.P.D.			Comp. Star.
		m	s	$^{\circ}$								h	m	s	$^{\circ}$	'	"	
1893. Feb.	B.	8	7	6 17	0 00	0 00	9 4275	+ 2 56 6	0 0	0 0	3	...	...	...	...	...	...	s
	"	8	7	24 9	0 00	0 00	9 4684	- 9 30 2	0 0	+ 0 3	3	1	54	36 76	56	1	13 4	r
	"	10	7	34 59	0 00	0 00	9 5003	+ 0 1 5	0 0	+ 0 3	3	...	...	...	...	...	...	t
	"	10	7	41 29	0 00	0 00	9 5127	+ 7 7 6	+ 0 1	- 0 2	2	1	57	44 26	55	58	17 0	u
	T. H.	14	8	47 14	0 00	0 00	9 6082	+ 9 18 8	0 0	- 0 4	1	...	...	...	...	...	...	v
	H.	15	9	45 32	0 00	0 00	9 6430	- 4 24 7	- 0 1	- 0 2	2	...	...	...	...	...	...	w
	"	15	9	50 59	0 00	0 00	9 6440	- 4 4 2	- 0 1	0 0	5	2	5	51 75	55	48	31 7	x
	"	15	10	3 44	+ 0 01	0 00	9 6471	- 9 53 9	- 0 3	+ 0 4	2	2	5	52 47	55	49	5 8	y
	B.	16	6	59 23	0 00	0 00	9 4567	- 6 17 2	0 0	+ 0 2	3	2	7	16 40	55	46	19 1	x
	"	16	7	5 18	0 00	0 00	9 4699	+ 11 3 0	0 0	- 0 4	3	...	...	...	...	...	...	z

Notes.

The observations are corrected for refraction but not for parallax. They are also corrected for the error of inclination of the wires, and where necessary for the motion of the comets in R.A. and N.P.D.
On January 15 Brooks' Comet was very faint; no nucleus seen. On February 10 it was exceedingly faint and difficult to observe.
On January 20 Holmes' Comet was small and very bright, but it rapidly became fainter and more diffused.

Comparison Stars.				Authority.	
Star's Name.	R.A., 1893'o.	N.P.D., 1893'o.			
	h m s	° ' "			
<i>a</i> B.D. + 62°, 1889	21 1 54.94	27 2 49.7		Astr. Gesell. Cat. (Helsingfors-Gotha, 1875)	
<i>b</i> B.D. + 62°, 1885	21 0 17.03	27 15 17.0		" "	
<i>c</i> Piazzi XXII., 92	22 19 5.79	34 34 41.3		Greenwich Observations, 1890.	
<i>d</i> B.D. + 54°, 2773	22 21 39.39	34 51 50.0		Astr. Gesell. Cat. (Helsingfors-Gotha, 1875)	
<i>e</i> B.D. + 47°, 4061	23 5 2	42 11		Equatorial comparisons with neighbouring stars.	
<i>f</i> B.D. + 47°, 4060	23 5 12	42 26		Bonn Observations, vol. v.	
<i>g</i> W.B. (2) XXIII., 1306	0 1 7.66	56 56 27.6		Paris Observations in 1862 and 1881.	
<i>h</i> Anonymous	0 4 14	57 28		Difference from Star <i>i</i> .	
<i>i</i> B.D. + 32°, 10	0 4 48	57 23		Bonn Observations, vol. iv.	
<i>j</i> B.D. + 30°, 27	0 9 34.33	59 19 50.6		" " vol. vi.	
<i>k</i> B.D. + 29°, 30	0 10 22	59 50		" " vol. iv.	
<i>l</i> B.D. + 26°, 62	0 22 56	63 19		" "	
<i>m</i> Lalande, 2729	1 24 47.93	56 22 41.8		Paris Observations, 1881.	
<i>n</i> B.D. + 33°, 267	1 32 31.70	56 11 45.9		Bonn Observations, vol. vi.	
<i>o</i> B.D. + 33°, 282	1 36 9	56 16		" " vol. iv.	
<i>p</i> W.B. (2) I, 1047	1 47 27.99	56 1 45.8		Weisse's Bessel	
<i>q</i> B.D. + 33°, 325	1 50 19	56 8		Bonn Observations, vol. iv.	
<i>r</i> Lalande, 3619	1 52 44.36	56 10 51.1		Paris Observations, 1880.	

Star's Name.		R.A., 1893°.		N.P.D., 1893°.		Authority.
s	t	h	m	°	'	
B.D. + 33°, 339		1	55	55	59	Bonn Observations, vol. iv.
B.D. + 33°, 353		1	57	55	57	" "
W.B. (2) I., 1292		1	56	55	51	Weisse's Bessel.
B.D. + 34°, 382		2	3	55	41	Bonn Observations, vol. iv.
B.D. + 33°, 381		2	7	55	52	" "
Lalande, 4092		2	7	55	52	Paris Observations, 1882.
Lalande, 4086		2	7	55	59	" "
B.D. + 34°, 396		2	8	55	36	Bonn Observations, vol. iv.

Note.

The place of star *e* in the B.D. reduced to 1893°0 (viz., R.A. 23^h 5^m 26^s, N.P.D. 42° 10') appears to be largely in error. The place given is derived from approximate equatorial comparisons with neighbouring stars.

The initials L., H., A. C., B., T. H., are those of Mr. Lewis, Mr. Hollis, Mr. Crommelin, Mr. Bryant, and Mr. Hudson respectively.

Erratum in 'Monthly Notices,' liii. 3 (1893 January), pp. 134, 135.
Star *d* (Lalande 25647), N.P.D., for 57° 33' 55''·0 read 57° 35' 55''·0.
Corresponding N.P.D. of *e*, for 57° 40' 11''·3 read 57° 42' 11''·3.

Errata.

In Mr. Gledhill's paper, *Monthly Notices*, vol. liii. pp. 149, 150, the *observed* times should read $8^h 55^m$, &c., instead of $8^h 55$. The *predicted* times, however, being quoted from Mr. Marth's Ephemeris, are given in decimals of an hour.

In the obituary of Prof. J. C. Adams, *Monthly Notices*, vol. liii. p. 201,

1st line from top, *for 39' read 29'* ; and
 2nd „ „ *for 23.25 read 33.25 years.*